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CalTech Ref. No. CIT-3391

AMENDMENTS TO THE CLAIMS:

Kindly amend the subject application by canceling claims 1-42 as follows:

Listing of Claims:

1-42. (canceled)

43. (original) A method of compressing a hybrid mesh representation of an object surface comprising:

applying a wavelet transform to transform the hybrid mesh representation into one or more wavelet coefficients; and

encoding the wavelet coefficients with a progressive encoding algorithm.

- 44. (original) The method of claim 43 wherein the progressive encoding algorithm is a zero-tree algorithm.
- 45. (original) The method of claim 43 further comprising encoding one or more of the irregular operations which are performed in creating the hybrid mesh representation.
- 46. (original) A method of de-compressing a coded form of a hybrid mesh representation of an object surface comprising:

applying a progressive decoding algorithm to the coded mesh to recover one or more wavelet coefficients; and

applying an inverse wavelet transform algorithm to the one or more coefficients to obtain a full or partial reconstruction of the object surface.

- 47. (original) The method of claim 46 where the progressive decoding algorithm is a zero-tree algorithm.
- 48. (original) The method of claim 46 further comprising decoding and performing one or more irregular operations to obtain the full or partial reconstruction.